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## (54) LUBRICATING OIL FOR REFRIGERANT COMPRESSION TYPE REFRIGERATING CYCLE APPARATUS AND WORKING FLUID

### (57)Abstract:

PROBLEM TO BE SOLVED: To obtain a lubricating oil for a refrigerant compression type refrigerating cycle apparatus, which has proper compatibility with and solubility in a 2-4C hydrocarbon refrigerant having no halogen atom, keeps viscosity not to impair lubricating properties, reduces the amount of the refrigerant filled and has excellent lubricating properties, stability, etc., and a working fluid.

SOLUTION: In the lubricating oil for refrigerant compression type refrigerating cycle apparatus with which the 2-4C hydrocarbon refrigerant containing no halogen atom is used, the lubricating oil comprises an ether compound represented by general formula R1-A-OR2 (R1 and R2 are each a 1-4C alkyl group; A is a polymerization chain consisting of m oxyethylene groups and n oxypropylene groups; m is an integer of 0-50; n is an integer of 2-50; m/n is  $\leq 1$ ) as a main component and has 10-100 mm<sup>2</sup>/s viscosity at 40° C. The working fluid for the refrigerant compression type refrigerating cycle apparatus comprises the 2-4C hydrocarbon refrigerant containing no halogen atom and the lubricating oil.

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